

## High Performance Sealing Solutions for Hygienic Applications



Angst+Pfister is a member of EHEDG (European Hygienic Engineering and Design Group), a non-governmental organisation dedicated to the optimisation of hygienic design and food technology.

At Angst+Pfister, we pay particular attention to maintaining the highest hygienic standards in our technical solutions and always meeting the latest specifications in food production and processing.

Thanks to this important partnership with EHEDG, we are strengthening our development and quality efforts in process industry initiatives and expanding our expertise in hygienic and safe food preparation.

We offer customized engineering solutions and high-tech materials for sensors, valves and pumps in the field of sealing technology.

Everything from one source:

- Global Production Platform: Combination of own capacities with reserved capacities at certified production partners
- Global Logistics Center with more than 140,000 items in stock, just-in-time, Kanban and Supply Chain Management Solutions
- Guarantees the best solution for customer-specific requirements, the right quality standards and the best price in each case
- An extensive stock of sealing technology products, all of which have approvals

### Benefits

- Customized engineering and consulting on site
- Very high international certification level
- Very high availability of standard materials and products suitable for DIN 11853 and DIN 11864

### Materials for hygienic applications

- High chemical resistance to a wide range of aggressive liquids
- Suitable for Cleaning-in-Place (CIP) and Sterilization-in-Place (SIP) applications
- Temperature resistance from -60°C to +200°C
- Meets all important approvals for the food industry

### Engineering support for EHEDG certification

- EHEDG-certified engineers and internal know-how of the EHEDG Design Guidelines
- Many years of experience in design and layout of hygienic seals



### Contact

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## Industries

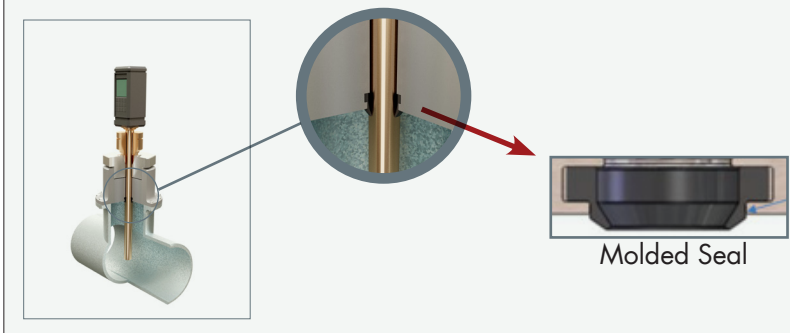
- Processes in the food and beverage industry
- Processes for pharmaceutical, cosmetic and biotech products

## Typical products

- Static: O-rings, molded seals (e.g. lip seals)
- Dynamic: rotary seals, stroke seals

## Success Stories:

Static seal: Hygienic Lip-Seal Design (PERTEC UP FKM) for a sensor adapter



Challenge: Dead space free development of a hygienic seal according to EHEDG by FKM with FDA and EG 1935/2004 for temperatures from -35°C to +200°C.

Angst+Pfister designed a special seal with a surface roughness\* < 0.8 especially for this purpose, which was able to secure the customer a new profit upgrade in his portfolio.

All according to EHEDG standards and with high chemical resistance thanks to PERTEC® UP FKM 70.501-07.

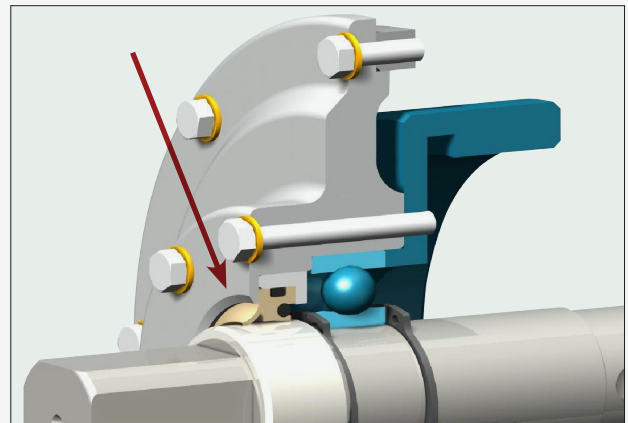
\* Reference specification, since not measurable on the elastomer

Challenge: Development of a hygienic radial shaft seal for food production according to EC 1935/2004 standards and waterproof to IP69K.

Angst+Pfister has developed a specific PTFE radial shaft seal for an engine especially for this purpose.

Added value for the customer, who thus received a single compact seal instead of several separate individual parts.

Dynamic seal: PTFE radial shaft seal for a drum motor



O-Rings



Rotary shaft seals



Molded seals

## Approvals and Conformities

BfR XV (Silicon)

D.M. 21/03/1973

EC 1935/2004 article 3

FDA - CFR 21 - 177.2600 food a) - f)

French Arrêté 17.12.92 No. 293 (migration test)

GB 4806.1-2016

LFGB § 30/31

SR 817.023.21

3-A Sanitary Standard Number 18-03 Class I

USP Class VI chapter 87 and 88, 121°C

